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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/737,780

12/18/2000

Hironao Tanaka

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09/07/2004

SUGHRUE, MION, ZINN, MACPEAK & SEAS, PPC
2100 PENNSYLVANIA AVE., N.W.
WASHINGTON, DC 20037-3213

EXAMINER

HOM, SHICK C

ART UNIT

PAPER NUMBER

2666

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/737,780

Applicant(s)

TANAKA ET AL.

Examiner

Shick C Hom

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/18/00, 7/13/01, 11/6/02, 6/5/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/13/01-6/5/03</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Specification

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

2. The drawings are objected to because of typo in Fig. 1 in box 10a the box labeled 12b should be labeled as 12a. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of

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the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. Claims 4, 14-15, 17, 25-26, and 29-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 4 lines 4-5 which recite "said source point" lacks clear antecedent basis because no source point have been previously recited in the claims and therefore the limitation is not clearly understood; further it is not clear whether it is reciting ---said test point--- as in claim 1 lines 3-4. In claims 14 and 15 line 6 which recite "said copied data" lacks clear antecedent basis. In claim 17 line 8 which recite "said round-trip propagation delay time" lacks clear antecedent basis. In claim 25 line 7 and claim 26 line 4 which recite "a response cell" is not clear as to whether it is reciting said response

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cell of claim 18 line 7 or a second response cell. In claims 29-31 which recite "claim 27" is not clear as to whether they're reciting ---claim 28---; examiner will assume that they are depending from claim 28.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Uriu et al. (5,875,177).

Regarding claim 1:

Uriu et al. disclose the ATM test equipment (see abstract and col. 2 lines 28-35 which recite providing test cell for ATM switch) comprising: transponder circuitry for formulating an ATM test cell, according to a selected one of predetermined test modes, with a header identifying a test point and a response point and a test mode value identifying the selected test mode

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(in Fig. 2, see the test cell generation section including the generation of the test cell header at the sending unit 8 and col. 4 line 55 to col. 5 line 3 which recite the header including the specific VCI as the test cell identifier in response to test command), transmitting the test cell to an ATM switching system, and receiving a response cell containing said test mode value from the ATM switching system (in Fig. 2, see the receiver 14 for receiving the cell from the ATM switch 13); and measurement circuitry for analyzing data contained in the received response cell according to the test mode value of the response cell (see col. 3 lines 21-31 which recite detecting and checking the received test cell clearly reads on measurement circuitry for analyzing received data as claimed).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 5-6, 18-19, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uriu et al. (5,875,177) in view of Gruber et al. (5,450,394).

For claim 5, Uriu et al. disclose the system and method described in paragraph 5 of this office action.

Regarding claim 6:

Uriu et al. disclose the ATM testing system for testing an ATM network between a source node and a responder node (see abstract, col. 2 lines 28-35 which recite providing test cell for ATM switch, and Fig. 2 which shows the source node 8 and responder node 14), said source node comprising: transponder circuitry for formulating a test cell, according to a selected

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one of predetermined test modes, with a header identifying said source node and said responder node and a test mode value identifying the selected test mode (in Fig. 2, see the test cell generation section including the generation of the test cell header at the sending unit 8 and col. 4 line 55 to col. 5 line 3 which recite the header including the specific VCI as the test cell identifier in response to test command), transmitting the test cell to said ATM network, and receiving a response cell containing said test mode value from the network (in Fig. 2, see the receiver 14 for receiving the cell from the ATM switch 13); and measurement circuitry for analyzing data contained in the received response cell according to the test mode value contained therein (see col. 3 lines 21-31 which recite detecting and checking the received test cell clearly reads on measurement circuitry for analyzing received data as claimed).

Regarding claims 18, 19:

Uriu et al. disclose the method of testing an ATM network (see abstract and col. 2 lines 28-35 which recite providing test cell for ATM switch), comprising the steps of: a) at a source node, formulating, according to a selected one of predetermined test modes, a test cell with a cell header identifying said source node and a responder node and a test mode value identifying the selected test mode (in Fig. 2, see the test cell

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generation section including the generation of the test cell header at the sending unit 8 and col. 4 line 55 to col. 5 line 3 which recite the header including the specific VCI as the test cell identifier in response to test command), and transmitting the cell to said ATM network; b) receiving, at said responder node, said test cell (in Fig. 2, see the receiver 14 for receiving the cell from the ATM switch 13) and d) analyzing data contained in the received response cell according to the test mode value of the received response cell (see col. 3 lines 21-31 which recite detecting and checking the received test cell clearly reads on measurement circuitry for analyzing received data as claimed).

Regarding claim 28:

Uriu et al. disclose the method of testing an ATM switch between a source point and a response point, said source and response points being connected to said ATM switch (see abstract, col. 2 lines 28-35 which recite providing test cell for ATM switch, and Fig. 2 which shows the source point 8, response point 14, and ATM switch 13), comprising the steps of: a) at said source point, formulating, according to a selected one of predetermined test modes, a test cell with a header identifying said source and response points and a test mode value identifying the selected test mode (in Fig. 2, see the

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test cell generation section including the generation of the test cell header at the sending unit 8 and col. 4 line 55 to col. 5 line 3 which recite the header including the specific VCI as the test cell identifier in response to test command), and transmitting the cell to said ATM switch; b) at said response point, receiving said test cell (in Fig. 2, see the receiver 14 for receiving the cell from the ATM switch 13) and d) analyzing data contained in the received response cell according to the test mode value of the received response cell (see col. 3 lines 21-31 which recite detecting and checking the received test cell clearly reads on measurement circuitry for analyzing received data as claimed).

For claims 5-6, 18, and 28, Uriu et al. disclose all the subject matter of the claimed invention with the exception of Wherein said responder node comprising transponder circuitry for receiving said test cell and formulating a cell, according to the test mode value of the received test cell, with a header identifying said responder node and said source node and the test mode value of the received test cell, and transmitting the formulated cell to said network as said response cell and analyzing data being at the source point as in claims 6, 18, 28; and the timing circuitry for producing a first time record indicating the transmit time of said test cell and a second time

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record indicating the receive time of said response cell, and wherein said measurement circuitry is configured to use said first and second time records to determine a propagation delay time as in claim 5.

Gruber et al. from the same or similar fields of endeavor teach that it is known to provide said responder node comprising transponder circuitry for receiving said test cell and formulating a cell, according to the test mode value of the received test cell, with a header identifying said responder node and said source node and the test mode value of the received test cell, and transmitting the formulated cell to said network as said response cell and analyzing data being at the source point (see Figs. 1 and 2, col. 2 lines 46-52, and col. 3 lines 18-36 which recite the far-end sent back to the monitoring point the received signal and both near-end and far-end monitoring of delay analysis); and the timing circuitry for producing a first time record indicating the transmit time of said test cell and a second time record indicating the receive time of said response cell, and wherein said measurement circuitry is configured to use said first and second time records to determine a propagation delay time (see the timestamp in Figs. 1 and 2). Thus, it would have been obvious to the person having ordinary skill in the art at the time the

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invention was made to provide said responder node comprising transponder circuitry for receiving said test cell and formulating a cell, according to the test mode value of the received test cell, with a header identifying said responder node and said source node and the test mode value of the received test cell, and transmitting the formulated cell to said network as said response cell and analyzing data being at the source point and the timing circuitry for producing a first time record indicating the transmit time of said test cell and a second time record indicating the receive time of said response cell, and wherein said measurement circuitry is configured to use said first and second time records to determine a propagation delay time as taught by Gruber et al. in the communications system and method of Uriu et al. The responder node comprising transponder circuitry for receiving said test cell and formulating a cell, according to the test mode value of the received test cell, with a header identifying said responder node and said source node and the test mode value of the received test cell, and transmitting the formulated cell to said network as said response cell and analyzing data being at the source point can be implemented by connecting the measurement circuitry for analyzing to the source node and the test cell generating circuitry to the receiver node of Uriu et al. The

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motivation for providing responder node comprising transponder circuitry for receiving said test cell and formulating a cell, according to the test mode value of the received test cell, with a header identifying said responder node and said source node and the test mode value of the received test cell, and transmitting the formulated cell to said network as said response cell; analyzing data being at the source point; and the timing circuitry for producing a first time record indicating the transmit time of said test cell and a second time record indicating the receive time of said response cell, and wherein said measurement circuitry is configured to use said first and second time records to determine a propagation delay time as taught by Gruber et al. in the communication system and method of Uriu et al. being that it provides the added feature of monitoring for cell delays at the transmitting and receiving end.

Allowable Subject Matter

8. Claims 2-4, 7-17, 20-27, and 29-31 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

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Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

VanDervort discloses measuring round trip time in ATM network virtual connections.

Takahasi discloses loopback cell control system.

Roppel discloses method and device for measuring cell propagation time in ATM networks.

Merchant discloses an asynchronous transfer mode (ATM) transmission test cell generator.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH



DANG TON
PRIMARY EXAMINER